

2010 Annual Revision Cycle

Report on Proposals

A compilation of NFPA® Technical Committee Reports on Proposals for public review and comment

Public Comment Deadline: September 4, 2009

NOTE: The proposed NFPA documents addressed in this Report on Proposals (ROP) and in a follow-up Report on Comments (ROC) will only be presented for action when proper Amending Motions have been submitted to the NFPA by the deadline of April 9, 2010. The June 2010 NFPA Conference & Expo will be held June 7–10, 2010 at the Mandalay Bay Convention Center, Las Vegas, NV. During the meeting, the Association Technical Meeting (Tech Session) will be held June 9–10, 2010. Documents that receive no motions will not be presented at the meeting and instead will be forwarded directly to the Standards Council for action on issuance. For more information on the rules and for up-to-date information on schedules and deadlines for processing NFPA documents, check the NFPA website (www.nfpa.org) or contact NFPA Standards Administration.



National Fire Protection Association®

1 BATTERYMARCH PARK, QUINCY, MA 02169-7471

Information on NFPA Codes and Standards Development

I. Applicable Regulations. The primary rules governing the processing of NFPA documents (codes, standards, recommended practices, and guides) are the *NFPA Regulations Governing Committee Projects (Regs)*. Other applicable rules include *NFPA Bylaws*, *NFPA Technical Meeting Convention Rules*, *NFPA Guide for the Conduct of Participants in the NFPA Standards Development Process*, and the *NFPA Regulations Governing Petitions to the Board of Directors from Decisions of the Standards Council*. Most of these rules and regulations are contained in the *NFPA Directory*. For copies of the *Directory*, contact Codes and Standards Administration at NFPA Headquarters; all these documents are also available on the NFPA website at “www.nfpa.org.”

The following is general information on the NFPA process. All participants, however, should refer to the actual rules and regulations for a full understanding of this process and for the criteria that govern participation.

II. Technical Committee Report. The Technical Committee Report is defined as “the Report of the Technical Committee and Technical Correlating Committee (if any) on a document. A Technical Committee Report consists of the Report on Proposals (ROP), as modified by the Report on Comments (ROC), published by the Association.”

III. Step 1: Report on Proposals (ROP). The ROP is defined as “a report to the Association on the actions taken by Technical Committees and/or Technical Correlating Committees, accompanied by a ballot statement and one or more proposals on text for a new document or to amend an existing document.” Any objection to an action in the ROP must be raised through the filing of an appropriate Comment for consideration in the ROC or the objection will be considered resolved.

IV. Step 2: Report on Comments (ROC). The ROC is defined as “a report to the Association on the actions taken by Technical Committees and/or Technical Correlating Committees accompanied by a ballot statement and one or more comments resulting from public review of the Report on Proposals (ROP).” The ROP and the ROC together constitute the Technical Committee Report. Any outstanding objection following the ROC must be raised through an appropriate Amending Motion at the Association Technical Meeting or the objection will be considered resolved.

V. Step 3a: Action at Association Technical Meeting. Following the publication of the ROC, there is a period during which those wishing to make proper Amending Motions on the Technical Committee Reports must signal their intention by submitting a Notice of Intent to Make a Motion. Documents that receive notice of proper Amending Motions (Certified Amending Motions) will be presented for action at the annual June Association Technical Meeting. At the meeting, the NFPA membership can consider and act on these Certified Amending Motions as well as Follow-up Amending Motions, that is, motions that become necessary as a result of a previous successful Amending Motion. (See 4.6.2 through 4.6.9 of *Regs* for a summary of the available Amending Motions and who may make them.) Any outstanding objection following action at an Association Technical Meeting (and any further Technical Committee consideration following successful Amending Motions, see *Regs* at 4.7) must be raised through an appeal to the Standards Council or it will be considered to be resolved.

VI. Step 3b: Documents Forwarded Directly to the Council. Where no Notice of Intent to Make a Motion (NITMAM) is received and certified in accordance with the Technical Meeting Convention Rules, the document is forwarded directly to the Standards Council for action on issuance. Objections are deemed to be resolved for these documents.

VII. Step 4a: Council Appeals. Anyone can appeal to the Standards Council concerning procedural or substantive matters related to the development, content, or issuance of any document of the Association or on matters within the purview of the authority of the Council, as established by the *Bylaws* and as determined by the Board of Directors. Such appeals must be in written form and filed with the Secretary of the Standards Council (see 1.6 of *Regs*). Time constraints for filing an appeal must be in accordance with 1.6.2 of the *Regs*. Objections are deemed to be resolved if not pursued at this level.

VIII. Step 4b: Document Issuance. The Standards Council is the issuer of all documents (see Article 8 of *Bylaws*). The Council acts on the issuance of a document presented for action at an Association Technical Meeting within 75 days from the date of the recommendation from the Association Technical Meeting, unless this period is extended by the Council (see 4.8 of *Regs*). For documents forwarded directly to the Standards Council, the Council acts on the issuance of the document at its next scheduled meeting, or at such other meeting as the Council may determine (see 4.5.6 and 4.8 of *Regs*).

IX. Petitions to the Board of Directors. The Standards Council has been delegated the responsibility for the administration of the codes and standards development process and the issuance of documents. However, where extraordinary circumstances requiring the intervention of the Board of Directors exist, the Board of Directors may take any action necessary to fulfill its obligations to preserve the integrity of the codes and standards development process and to protect the interests of the Association. The rules for petitioning the Board of Directors can be found in the *Regulations Governing Petitions to the Board of Directors from Decisions of the Standards Council* and in 1.7 of the *Regs*.

X. For More Information. The program for the Association Technical Meeting (as well as the NFPA website as information becomes available) should be consulted for the date on which each report scheduled for consideration at the meeting will be presented. For copies of the ROP and ROC as well as more information on NFPA rules and for up-to-date information on schedules and deadlines for processing NFPA documents, check the NFPA website (www.nfpa.org) or contact NFPA Codes & Standards Administration at (617-984-7246).

2010 Annual Revision Cycle ROP Contents

by NFPA Numerical Designation

Note: Documents appear in numerical order.

| NFPA No. | Type Action | Title | Page No. |
|----------|-------------|--|----------|
| 25 | P | Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems | 25-1 |
| 30B | P | Code for the Manufacture and Storage of Aerosol Products | 30B-1 |
| 33 | P | Standard for Spray Application Using Flammable or Combustible Materials..... | 33-1 |
| 34 | P | Standard for Dipping and Coating Processes Using Flammable or Combustible Liquids..... To be retitled as Standard for Dipping, Coating, and Printing Processes Using Flammable or Combustible Liquids | 34-1 |
| 40 | P | Standard for the Storage and Handling of Cellulose Nitrate Film..... | 40-1 |
| 58 | P | Liquefied Petroleum Gas Code..... | 58-1 |
| 73 | P | Electrical Inspection Code for Existing Dwellings | 73-1 |
| | | To be retitled as Standard for Electrical Inspections for Existing Dwellings | |
| 86 | P | Standard for Ovens and Furnaces | 86-1 |
| 87 | N | Recommended Practice for Fluid Heaters..... | 87-1 |
| 88A | P | Standard for Parking Structures | 88A-1 |
| 96 | P | Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations | 96-1 |
| 160 | P | Standard for the Use of Flame Effects Before an Audience..... | 160-1 |
| 303 | P | Fire Protection Standard for Marinas and Boatyards | 303-1 |
| 307 | P | Standard for the Construction and Fire Protection of Marine Terminals, Piers, and Wharves | 307-1 |
| 312 | P | Standard for Fire Protection of Vessels During Construction, Conversion, Repair, and Lay-Up..... | 312 -1 |
| 502 | P | Standard for Road Tunnels, Bridges, and Other Limited Access Highways | 502-1 |
| 556 | N | Guide on Methods for Evaluating Fire Hazard to Occupants of Passenger Road Vehicles..... | 556-1 |
| 654 | P | Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids..... | 654-1 |
| 780 | P | Standard for the Installation of Lightning Protection Systems | 780-1 |
| 1000 | P | Standard for Fire Service Professional Qualifications Accreditation and Certification Systems..... | 1000-1 |
| 1071 | C | Standard for Emergency Vehicle Technician Professional Qualifications | 1071-1 |
| 1126 | P | Standard for the Use of Pyrotechnics Before a Proximate Audience | 1126-1 |
| 1145 | P | Guide for the Use of Class A Foams in Manual Structural Fire Fighting..... | 1145-1 |

TYPES OF ACTION

P Partial Revision **C** Complete Revision **N** New Document **R** Reconfirmation **W** Withdrawal

**2010 Annual Revision Cycle ROP
Committees Reporting**

| | | Type Action | Page No. |
|---|--|--------------------|-----------------|
| Aerosol Products | | | |
| 30B | Code for the Manufacture and Storage of Aerosol Products | P | 30B-1 |
| Finishing Processes | | | |
| 33 | Standard for Spray Application Using Flammable or Combustible Materials | P | 33-1 |
| 34 | Standard for Dipping and Coating Processes Using Flammable or Combustible Liquids | P | 34-1 |
| Forest and Rural Fire Protection | | | |
| 1145 | Guide for the Use of Class A Foams in Manual Structural Fire Fighting | P | 1145-1 |
| Garages and Parking Structures | | | |
| 88A | Standard for Parking Structures | P | 88A-1 |
| Handling and Conveying of Dusts, Vapors, and Gases | | | |
| 654 | Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids | P | 654-1 |
| Hazard and Risk of Contents and Furnishings | | | |
| 556 | Guide on Methods for Evaluating Fire Hazard to Occupants of Passenger Road Vehicles | N | 556-1 |
| Hazardous Chemicals | | | |
| 40 | Standard for the Storage and Handling of Cellulose Nitrate Film | P | 40-1 |
| Inspection, Testing, and Maintenance of Water-Based Systems | | | |
| 25 | Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems | P | 25-1 |
| Lightning Protection | | | |
| 780 | Standard for the Installation of Lightning Protection Systems | P | 780-1 |
| Liquefied Petroleum Gases | | | |
| 58 | Liquefied Petroleum Gas Code | P | 58-1 |
| Marinas and Boatyards | | | |
| 303 | Fire Protection Standard for Marinas and Boatyards | P | 303-1 |
| Marine Terminals | | | |
| 307 | Standard for the Construction and Fire Protection of Marine Terminals, Piers, and Wharves | P | 307-1 |
| National Electrical Code | | | |
| Electrical Systems Maintenance | | | |
| 73 | Electrical Inspection Code for Existing Dwellings | P | 73-1 |
| Ovens and Furnaces | | | |
| 86 | Standard for Ovens and Furnaces | P | 86-1 |
| 87 | Recommended Practice for Fluid Heaters | N | 87-1 |
| Professional Qualifications | | | |
| Accreditation and Certification to Fire Service Professional Qualifications | | | |
| 1000 | Standard for Fire Service Professional Qualifications Accreditation and Certification Systems | P | 1000-1 |
| Emergency Vehicle Mechanic Technicians Professional Qualifications | | | |
| 1071 | Standard for Emergency Vehicle Technician Professional Qualifications | C | 1071-1 |
| Road Tunnel and Highway Fire Protection | | | |
| 502 | Standard for Road Tunnels, Bridges, and Other Limited Access Highways | P | 502-1 |
| Shipbuilding, Repair, and Lay-Up | | | |
| 312 | Standard for Fire Protection of Vessels During Construction, Conversion, Repair, and Lay-Up | P | 312-1 |
| Special Effects | | | |
| 160 | Standard for the Use of Flame Effects Before an Audience | P | 160-1 |
| 1126 | Standard for the Use of Pyrotechnics Before a Proximate Audience | P | 1126-1 |
| Venting Systems for Cooking Appliances | | | |
| 96 | Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations | P | 96-1 |

COMMITTEE MEMBER CLASSIFICATIONS^{1,2,3,4}

The following classifications apply to Committee members and represent their principal interest in the activity of the Committee.

1. M Manufacturer: A representative of a maker or marketer of a product, assembly, or system, or portion thereof, that is affected by the standard.
2. U User: A representative of an entity that is subject to the provisions of the standard or that voluntarily uses the standard.
3. IM Installer/Maintainer: A representative of an entity that is in the business of installing or maintaining a product, assembly, or system affected by the standard.
4. L Labor: A labor representative or employee concerned with safety in the workplace.
5. RT Applied Research/Testing Laboratory: A representative of an independent testing laboratory or independent applied research organization that promulgates and/or enforces standards.
6. E Enforcing Authority: A representative of an agency or an organization that promulgates and/or enforces standards.
7. I Insurance: A representative of an insurance company, broker, agent, bureau, or inspection agency.
8. C Consumer: A person who is or represents the ultimate purchaser of a product, system, or service affected by the standard, but who is not included in (2).
9. SE Special Expert: A person not representing (1) through (8) and who has special expertise in the scope of the standard or portion thereof.

NOTE 1: "Standard" connotes code, standard, recommended practice, or guide.

NOTE 2: A representative includes an employee.

NOTE 3: While these classifications will be used by the Standards Council to achieve a balance for Technical Committees, the Standards Council may determine that new classifications of member or unique interests need representation in order to foster the best possible Committee deliberations on any project. In this connection, the Standards Council may make such appointments as it deems appropriate in the public interest, such as the classification of "Utilities" in the National Electrical Code Committee.

NOTE 4: Representatives of subsidiaries of any group are generally considered to have the same classification as the parent organization.

**FORM FOR COMMENT ON NFPA REPORT ON PROPOSALS
2010 ANNUAL REVISION CYCLE
FINAL DATE FOR RECEIPT OF COMMENTS: 5:00 pm EDST, September 4, 2009**

For further information on the standards-making process, please contact the Codes and Standards Administration at 617-984-7249 or visit www.nfpa.org/codes.

For technical assistance, please call NFPA at 1-800-344-3555.

FOR OFFICE USE ONLY

Log #: _____

Date Rec'd: _____

Please indicate in which format you wish to receive your ROP/ROC electronic paper download
(Note: If choosing the download option, you must view the ROP/ROC from our website; no copy will be sent to you.)

Date 8/1/200X Name John B. Smith Tel. No. 253-555-1234

Company _____ Email _____

Street Address 9 Seattle St. City Tacoma State WA Zip 98402

***If you wish to receive a hard copy, a street address MUST be provided. Deliveries cannot be made to PO boxes.

Please indicate organization represented (if any) Fire Marshals Assn. of North America

1. (a) NFPA Document Title National Fire Alarm Code NFPA No. & Year NFPA 72, 200X ed.

(b) Section/Paragraph 4.4.1.1

2. Comment on Proposal No. (from ROP): 72-7

3. Comment Recommends (check one): new text revised text deleted text

4. Comment (include proposed new or revised wording, or identification of wording to be deleted): [Note: Proposed text should be in legislative format; i.e., use underscore to denote wording to be inserted (inserted wording) and strike-through to denote wording to be deleted (~~deleted wording~~).]

Delete exception.

5. **Statement of Problem and Substantiation for Comment:** (Note: State the problem that would be resolved by your recommendation; give the specific reason for your Comment, including copies of tests, research papers, fire experience, etc. If more than 200 words, it may be abstracted for publication.)

A properly installed and maintained system should be free of ground faults. The occurrence of one or more ground faults should be required to cause a 'trouble' signal because it indicates a condition that could contribute to future malfunction of the system. Ground fault protection has been widely available on these systems for years and its cost is negligible. Requiring it on all systems will promote better installations, maintenance and reliability.

6. Copyright Assignment

(a) I am the author of the text or other material (such as illustrations, graphs) proposed in the Comment.

(b) Some or all of the text or other material proposed in this Comment was not authored by me. Its source is as follows: (please identify which material and provide complete information on its source)

I hereby grant and assign to the NFPA all and full rights in copyright in this Comment and understand that I acquire no rights in any publication of NFPA in which this Comment in this or another similar or analogous form is used. Except to the extent that I do not have authority to make an assignment in materials that I have identified in (b) above, I hereby warrant that I am the author of this Comment and that I have full power and authority to enter into this assignment.

Signature (Required) _____

PLEASE USE SEPARATE FORM FOR EACH COMMENT

Mail to: Secretary, Standards Council · National Fire Protection Association
1 Batterymarch Park · Quincy, MA 02169-7471 OR
Fax to: (617) 770-3500 OR Email to: proposals_comments@nfpa.org

**FORM FOR COMMENT ON NFPA REPORT ON PROPOSALS
2010 ANNUAL REVISION CYCLE
FINAL DATE FOR RECEIPT OF COMMENTS: 5:00 pm EDST, September 4, 2009**

For further information on the standards-making process, please contact the Codes and Standards Administration at 617-984-7249 or visit www.nfpa.org/codes.

For technical assistance, please call NFPA at 1-800-344-3555.

FOR OFFICE USE ONLY

Log #: _____

Date Rec'd: _____

Please indicate in which format you wish to receive your ROP/ROC electronic paper download
(Note: If choosing the download option, you must view the ROP/ROC from our website; no copy will be sent to you.)

Date _____ Name _____ Tel. No. _____

Company _____ Email _____

Street Address _____ City _____ State _____ Zip _____

*****If you wish to receive a hard copy, a street address MUST be provided. Deliveries cannot be made to PO boxes.**

Please indicate organization represented (if any) _____

1. (a) NFPA Document Title _____ NFPA No. & Year _____

(b) Section/Paragraph _____

2. Comment on Proposal No. (from ROP): _____

3. Comment Recommends (check one): new text revised text deleted text

4. Comment (include proposed new or revised wording, or identification of wording to be deleted): [Note: Proposed text should be in legislative format; i.e., use underscore to denote wording to be inserted (inserted wording) and strike-through to denote wording to be deleted (~~deleted wording~~).]

5. **Statement of Problem and Substantiation for Comment:** (Note: State the problem that would be resolved by your recommendation; give the specific reason for your Comment, including copies of tests, research papers, fire experience, etc. If more than 200 words, it may be abstracted for publication.)

6. Copyright Assignment

(a) I am the author of the text or other material (such as illustrations, graphs) proposed in the Comment.

(b) Some or all of the text or other material proposed in this Comment was not authored by me. Its source is as follows: (please identify which material and provide complete information on its source)

I hereby grant and assign to the NFPA all and full rights in copyright in this Comment and understand that I acquire no rights in any publication of NFPA in which this Comment in this or another similar or analogous form is used. Except to the extent that I do not have authority to make an assignment in materials that I have identified in (b) above, I hereby warrant that I am the author of this Comment and that I have full power and authority to enter into this assignment.

Signature (Required) _____

PLEASE USE SEPARATE FORM FOR EACH COMMENT

Mail to: Secretary, Standards Council · National Fire Protection Association
1 Batterymarch Park · Quincy, MA 02169-7471 OR
Fax to: (617) 770-3500 OR Email to: proposals_comments@nfpa.org

Sequence of Events Leading to Issuance of an NFPA Committee Document

Step 1 Call for Proposals

▼ Proposed new document or new edition of an existing document is entered into one of two yearly revision cycles, and a Call for Proposals is published.

Step 2 Report on Proposals (ROP)

▼ Committee meets to act on Proposals, to develop its own Proposals, and to prepare its Report.

▼ Committee votes by written ballot on Proposals. If two-thirds approve, Report goes forward. Lacking two-thirds approval, Report returns to Committee.

▼ Report on Proposals (ROP) is published for public review and comment.

Step 3 Report on Comments (ROC)

▼ Committee meets to act on Public Comments to develop its own Comments, and to prepare its report.

▼ Committee votes by written ballot on Comments. If two-thirds approve, Report goes forward. Lacking two-thirds approval, Report returns to Committee.

▼ Report on Comments (ROC) is published for public review.

Step 4 Association Technical Meeting

▼ "*Notices of intent to make a motion*" are filed, are reviewed, and valid motions are certified for presentation at the Association Technical Meeting. ("Consent Documents" that have no certified motions bypass the Association Technical Meeting and proceed to the Standards Council for issuance.)

▼ NFPA membership meets each June at the Association Technical Meeting and acts on Technical Committee Reports (ROP and ROC) for documents with "certified amending motions."

▼ Committee(s) vote on any amendments to Report approved at NFPA Annual Membership Meeting.

Step 5 Standards Council Issuance

▼ Notification of intent to file an appeal to the Standards Council on Association action must be filed within 20 days of the NFPA Annual Membership Meeting.

▼ Standards Council decides, based on all evidence, whether or not to issue document or to take other action, including hearing any appeals.

The Association Technical Meeting

The process of public input and review does not end with the publication of the ROP and ROC. Following the completion of the Proposal and Comment periods, there is yet a further opportunity for debate and discussion through the Association Technical Meeting that takes place at the NFPA Annual Meeting.

The Association Technical Meeting provides an opportunity for the final Technical Committee Report (i.e., the ROP and ROC) on each proposed new or revised code or standard to be presented to the NFPA membership for the debate and consideration of motions to amend the Report. The specific rules for the types of motions that can be made and who can make them are set forth in NFPA's rules, which should always be consulted by those wishing to bring an issue before the membership at an Association Technical Meeting. The following presents some of the main features of how a Report is handled.

The Filing of a Notice of Intent to Make a Motion. Before making an allowable motion at an Association Technical Meeting, the intended maker of the motion must file, in advance of the session, and within the published deadline, a Notice of Intent to Make a Motion. A Motions Committee appointed by the Standards Council then reviews all notices and certifies all amending motions that are proper. The Motions Committee can also, in consultation with the makers of the motions, clarify the intent of the motions and, in certain circumstances, combine motions that are dependent on each other together so that they can be made in one single motion. A Motions Committee report is then made available in advance of the meeting listing all certified motions. Only these Certified Amending Motions, together with certain allowable Follow-Up Motions (that is, motions that have become necessary as a result of previous successful amending motions) will be allowed at the Association Technical Meeting.

Consent Documents. Often there are codes and standards up for consideration by the membership that will be noncontroversial and no proper Notices of Intent to Make a Motion will be filed. These "Consent Documents" will bypass the Association Technical Meeting and head straight to the Standards Council for issuance. The remaining documents are then forwarded to the Association Technical Meeting for consideration of the NFPA membership.

What Amending Motions Are Allowed. The Technical Committee Reports contain many Proposals and Comments that the Technical Committee has rejected or revised in whole or in part. Actions of the Technical Committee published in the ROP may also eventually be rejected or revised by the Technical Committee during the development of its ROC. The motions allowed by NFPA rules provide the opportunity to propose amendments to the text of a proposed code or standard based on these published Proposals, Comments, and Committee actions. Thus, the list of allowable motions include motions to accept Proposals and Comments in whole or in part as submitted or as modified by a Technical Committee action. Motions are also available to reject an accepted Comment in whole or part. In addition, Motions can be made to return an entire Technical Committee Report or a portion of the Report to the Technical Committee for further study.

The NFPA Annual Meeting, also known as the NFPA Conference & Expo, takes place in June of each year. A second Fall membership meeting was discontinued in 2004, so the NFPA Technical Committee Report Session now runs once each year at the Annual Meeting in June.

Who Can Make Amending Motions. NFPA rules also define those authorized to make amending motions. In many cases, the maker of the motion is limited by NFPA rules to the original submitter of the Proposal or Comment or his or her duly authorized representative. In other cases, such as a Motion to Reject an accepted Comment, or to Return a Technical Committee Report or a portion of a Technical Committee Report for Further Study, anyone can make these motions. For a complete explanation, the NFPA Regs should be consulted.

Action on Motions at the Association Technical Meeting. In order to actually make a Certified Amending Motion at the Association Technical Meeting, the maker of the motion must sign in at least an hour before the session begins. In this way a final list of motions can be set in advance of the session. At the session, each proposed document up for consideration is presented by a motion to adopt the Technical Committee Report on the document. Following each such motion, the presiding officer in charge of the session opens the floor to motions on the document from the final list of Certified Amending Motions followed by any permissible Follow-Up Motions. Debate and voting on each motion proceeds in accordance with NFPA rules. NFPA membership is not required in order to make or speak to a motion, but voting is limited to NFPA members who have joined at least 180 days prior to the Association Technical Meeting and have registered for the meeting. At the close of debate on each motion, voting takes place, and the motion requires a majority vote to carry. In order to amend a Technical Committee Report, successful amending motions must be confirmed by the responsible Technical Committee, which conducts a written ballot on all successful amending motions following the meeting and prior to the document being forwarded to the Standards Council for issuance.

Standards Council Issuance

One of the primary responsibilities of the NFPA Standards Council, as the overseer of the NFPA codes and standards development process, is to act as the official issuer of all NFPA codes and standards. When it convenes to issue NFPA documents, it also hears any appeals related to the document. Appeals are an important part of assuring that all NFPA rules have been followed and that due process and fairness have been upheld throughout the codes and standards development process. The Council considers appeals both in writing and through the conduct of hearings at which all interested parties can participate. It decides appeals based on the entire record of the process as well as all submissions on the appeal. After deciding all appeals related to a document before it, the Council, if appropriate, proceeds to issue the document as an official NFPA code or standard. Subject only to limited review by the NFPA Board of Directors, the decision of the Standards Council is final, and the new NFPA code or standard becomes effective twenty days after Standards Council issuance.

Report of the Committee on

Aerosol Products

Peter J. Willse, *Chair*

XL Global Asset Protection Services, CT [I]

Gerald J. Basta, Global Risk Consultants Corporation, IL [SE]
Tracey D. Bellamy, TVA Fire and Life Safety, Inc., GA [U]
 Rep. The Home Depot
James A. Bloome, Packaging Technologies, Inc., IA [M]
Richard A. Familia, Giant Resource Recovery Company, SC [U]
William A. Frauenheim, III, Diversified CPC International, Inc., IL [M]
 Rep. Consumer Specialty Products Association
David L. Fredrickson, Fredrickson & Associates LLC, WI [SE]
Edward S. Goldhammer, Schirmer Engineering Corporation, NV [I]
David Grandaw, Kidde-Fenwal, Inc., IL [M]
James Koskan, SUPERVALU, Inc., MN [U]
John A. LeBlanc, FM Global, MA [I]
Michael J. Madden, Hughes Associates, Inc., CA [SE]
Michael J. Nappi, Potomac Electric Power Company, DC [U]
 Rep. Edison Electric Institute
Martin J. Pabich, Underwriters Laboratories Inc., IL [RT]
Donald B. Pounder, Tyco/Grinnell Corporation, RI [M]
 Rep. National Fire Sprinkler Association
Donald E. Rowson, Industrial Hydrocarbons, Inc., CA [SE]
George A. Seuss, Jr., Verlan Fire Insurance Company, MD [I]
David C. Tabar, The Sherwin-Williams Company, OH [M]
Tim N. Testerman, Procter & Gamble Company, OH [M]
 Rep. NFPA Industrial Fire Protection Section
Jack W. Thacker, Allan Automatic Sprinkler Corp. of So. California, CA [IM]
 Rep. National Fire Sprinkler Association
Daniel J. Venier, Wells Fargo Insurance Services, MI [I]

Alternates

Thomas B. Arch, Global Risk Consultants Corporation, MN [SE]
 (Alt. to Gerald J. Basta)
D. Douglas Fratz, Consumer Specialty Products Association, DC [M]
 (Alt. to William A. Frauenheim, III)
Pravinray D. Gandhi, Underwriters Laboratories Inc., IL [RT]
 (Alt. to Martin J. Pabich)
Kenneth E. Isman, National Fire Sprinkler Association, Inc., NY [IM]
 (Alt. to Jack W. Thacker)
Ronald A. Schulz, XL Global Asset Protection Services, MI [I]
 (Alt. to Peter J. Willse)
David C. Swenson, The Sherwin-Williams Company, OH [M]
 (Alt. to David C. Tabar)
Paul A. Wolf, Packaging Technologies Inc., IA [M]
 (Alt. to James A. Bloome)
Martin H. Workman, The Viking Corporation, MI [M]
 (Alt. to Donald B. Pounder)

Staff Liaison: **Martha H. Curtis**

Committee Scope: This Committee shall have primary responsibility for documents on safeguarding against the fire and explosion hazards associated with the manufacturing, handling, and storage of aerosol products.

This list represents the membership at the time the Committee was balloted on the text of this edition. Since that time, changes in the membership may have occurred. A key to classifications is found at the front of this book.

The Report of the Technical Committee on **Aerosol Products** is presented for adoption.

This Report was prepared by the **Technical Committee on Aerosol Products** and proposes for adoption, amendments to NFPA 30B, **Code for the Manufacture and Storage of Aerosol Products**, 2007 edition. NFPA 30B-2007 is published in Volume 3 of the 2009 National Fire Codes and in separate pamphlet form.

This Report has been submitted to letter ballot of the **Technical Committee on Aerosol Products**, which consists of 21 voting members. The results of the balloting, after circulation of any negative votes, can be found in the report.

30B-1 Log #CP1 **Final Action: Accept**
(Entire Document)

Submitter: Technical Committee on Aerosol Products,
Recommendation: Review entire document to: 1) Update any extracted material by preparing separate proposals to do so, and 2) review and update references to other organizations documents, by preparing proposal(s) as required.

Substantiation: This action is consistent with the NFPA Regulations Governing Committee Projects for adding or updating extracted text or references.

Committee Meeting Action: Accept

Committee Statement: See recommendation and substantiation on proposal 30B-8 (Log #CP2) for updating extracted text and recommendation and substantiation on proposal 30B-6 (Log #CP3) for updating references.

Number Eligible to Vote: 21

Ballot Results: Affirmative: 17

Ballot Not Returned: 4 Bellamy, T., Familia, R., Pounder, D., Seuss, Jr., G.

30B-2 Log #2 **Final Action: Accept**
(Entire Document)

Submitter: Kenneth E. Isman, National Fire Sprinkler Association, Inc.
Recommendation: Change all metric references from K-81 sprinklers to K-80.

Change all metric references from K-161 sprinklers to K-160.

Change all metric references from K-202 sprinklers to K-200.

Change all metric references from K-235 sprinklers to K-240.

Change all metric references from K-314 sprinklers to K-320.

Change all metric references from K-363 sprinklers to K-360.

Substantiation: International agreement has been reached on the definition of metric K-factors for sprinklers. Manufacturers are only supposed to be marketing sprinklers with K-factors an even interval of 80. Above a certain size, they are permitted at intervals of 40. The exception to this rule is the metric conversion of the K-8 sprinkler, which does not follow the pattern of other sprinklers and is just rounded off to 115. Therefore, the only acceptable K-factors in metric units are 80, 115, 160, 200, 240, 280, 320, 360, and 400. No other numbers should be used.

Committee Meeting Action: Accept

Number Eligible to Vote: 21

Ballot Results: Affirmative: 17

Ballot Not Returned: 4 Bellamy, T., Familia, R., Pounder, D., Seuss, Jr., G.

30B-3 Log #5 **Final Action: Accept in Principle**
(1.1.4.1)

Submitter: David L. Fredrickson, Fredrickson & Associates LLC

Recommendation: Add new text to read as follows:

1.1.4.1 Metal containers which contain a product that meets the definitions in Sections 3.3.1 and 3.3.3, but are larger than 1000 ml (33.8 fl oz) shall not be classified as aerosol products, and are not protectable by the storage criteria of Chapters 6 or 7 of this code.

Substantiation: There are some products being manufactured and sold which meet the Aerosol definition in 3.3.1, but are in containers larger than the Aerosol Container as defined in 3.3.2. These containers, some of which are gallons in size, cannot be protected by the 30B Protection Tables. This new section clarifies that point.

Committee Meeting Action: Accept in Principle

Add new text 1.1.4.1 to read as follows:

1.1.4.1 Metal containers which contain a product that meets the definitions in 3.3.1 and 3.3.3, but are larger than 1000 ml (33.8 fl oz) shall not be classified as aerosol products, and this code shall not apply to the manufacture, storage, and display of such containers. are not protectable by the storage criteria of Chapters 6 or 7 of this code.

Committee Statement: The Committee agreed with the submitter's intent but text was added to clarify that the Committee has not written provisions to cover this subject.

Number Eligible to Vote: 21

Ballot Results: Affirmative: 17

Ballot Not Returned: 4 Bellamy, T., Familia, R., Pounder, D., Seuss, Jr., G.

30B-4 Log #CP4 **Final Action: Accept**
(Table 1.7.1)

Submitter: Technical Committee on Aerosol Products,

Recommendation: Switch SI and English units to be consistent with the rest of NFPA 30B.

Substantiation: The Committee accepted this editorial change as this is the only part of the Code where English units are first and SI units are second.

Committee Meeting Action: Accept

Number Eligible to Vote: 21

Ballot Results: Affirmative: 17

Ballot Not Returned: 4 Bellamy, T., Familia, R., Pounder, D., Seuss, Jr., G.

30B-5 Log #6 **Final Action: Reject**
(1.8.3, 6.2.3, 6.2.4, and 6.3.1.1.1.1 (New))

Submitter: David L. Fredrickson, Fredrickson & Associates LLC

Recommendation: Add new text to read as follows:

1.8.3 Products covered by Sections 6.2.4 and 6.3.1.1.1.1 shall not be classified as aerosol products and are not to be carton marked as per Section 1.8.2.

6.2.3 Level 1 aerosol products in DOT approved Plastic containers greater than 118 ml (4 fl oz) and with Chemical Heat of combustion less than 15 kJ/g (6450 Btu/lb) shall be treated as class III Commodity.

6.2.4 Level 1 aerosol products in Plastic containers greater than 118 ml (4 fl oz) and with Chemical Heats of Combustion equal to or greater than 15 kJ/g (6450 Btu/lb) are not to be treated as class III Commodity but shall be considered to be equivalent to flammable liquids in plastic containers as per NFPA 30, Flammable and Combustible Liquids Code.

6.3.1.1.1.1 Level 2 and Level 3 aerosol products in plastic containers larger than 118 ml (4 fl oz) are not to be protected as per the storage Tables of this code but shall be considered to be equivalent to flammable liquids in plastic containers as per NFPA 30, Flammable and Combustible Liquids Code.
Substantiation: Aerosol products in plastic containers larger than 118 ml (4 fl oz) are beginning to make an appearance in the supply chain. Many of these products have not been tested for sprinkler protection. I believe that these products are not protectable as per 30B and that the 4 new sections are required to clarify this fact.

Committee Meeting Action: Reject

Committee Statement: There is insufficient technical documentation to handle the proposed cutoff points in the submitter's recommendation and the 118 ml (4 fl oz) definition in 3.3.2 is being called into question. The submitter is encouraged to submit technical data to substantiate the recommendation for the ROC.

Number Eligible to Vote: 21

Ballot Results: Affirmative: 17

Ballot Not Returned: 4 Bellamy, T., Familia, R., Pounder, D., Seuss, Jr., G.

30B-6 Log #CP3 **Final Action: Accept**
(Chapter 2, 5.5.2, 6.3.3.3, 7.3.3, H.1.2.1)

Submitter: Technical Committee on Aerosol Products,

Recommendation: 1. Update the following references in the identified sections including:

2.2 NFPA Publications. National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471.

NFPA 1, Uniform Fire Code™, 2006 2009 edition.

NFPA 10, Standard for Portable Fire Extinguishers, 2007 edition.

NFPA 11, Standard for Low-, Medium-, and High-Expansion Foam, 2005 edition.

NFPA 12, Standard on Carbon Dioxide Extinguishing Systems, 2005 2008 edition.

NFPA 12A, Standard on Halon 1301 Fire Extinguishing Systems, 2004 2009 edition.

NFPA 13, Standard for the Installation of Sprinkler Systems, 2007 edition.

NFPA 14, Standard for the Installation of Standpipe and Hose Systems, 2007 edition.

NFPA 16, Standard for the Installation of Foam-Water Sprinkler and Foam-Water Spray Systems, 2003 2007 edition.

NFPA 17, Standard for Dry Chemical Extinguishing Systems, 2002 2009 edition.

NFPA 20, Standard for the Installation of Stationary Pumps for Fire Protection, 2007 edition.

NFPA 22, Standard for Water Tanks for Private Fire Protection, 2003 2008 edition.

NFPA 24, Standard for the Installation of Private Fire Service Mains and Their Appurtenances, 2007 edition.

NFPA 30, Flammable and Combustible Liquids Code, 2003 2008 edition.

NFPA 31, Standard for the Installation of Oil-Burning Equipment, 2006 edition.

NFPA 45, Standard on Fire Protection for Laboratories Using Chemicals, 2004 edition.

NFPA 54, National Fuel Gas Code, 2006 2009 edition.

NFPA 58, Liquefied Petroleum Gas Code, 2004 2008 edition.

NFPA 69, Standard on Explosion Prevention Systems, 2002 2008 edition.

NFPA 70, National Electrical Code®, 2005 2008 edition.

NFPA 72®, National Fire Alarm Code®, 2007 edition.

NFPA 80, Standard for Fire Doors and Other Opening Protectives, 2007 edition.

NFPA 85, Boiler and Combustion Systems Hazards Code, 2004 2007 edition.

NFPA 86, Standard for Ovens and Furnaces, 2007 edition.

NFPA 90A, Standard for the Installation of Air-Conditioning and Ventilating Systems, 2002 2009 edition.

NFPA 101®, Life Safety Code®, 2006 2009 edition.

NFPA 505, Fire Safety Standard for Powered Industrial Trucks Including Type Designations, Areas of Use, Conversions, Maintenance, and Operations, 2006 edition.

NFPA 2001, Standard on Clean Agent Fire Extinguishing Systems, 2004 2008 edition.

2.3 Other Publications.

2.3.1 ANSI Publication.

American National Standards Institute, Inc., 25 West 43rd Street, 4th Floor, New York, NY 10036.

ANSI/ASME B56.1, Safety Standard for Low-Lift and High-Lift Trucks, 1993 2004.

2.3.2 ASTM Publications.

ASTM International, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428-2959.

ASTM A47/A47M, Standard Specification for Ferritic Malleable Iron Castings, 1999 2004.

ASTM A48/A48M, Standard Specification for Gray Iron Castings, 2000 2008.

ASTM A395/A395M, Standard Specification for Ferritic Ductile Iron Pressure-Retaining Castings for Use at Elevated Temperatures, 1999 2004.

ASTM A536-84 (e1), Standard Specification for Ductile Iron Castings, 1999 2004.

2.3.3 Other Publication. (No change proposed)

2.4 References for Extracts in Mandatory Sections.

NFPA 30, Flammable and Combustible Liquids Code, 2003 2008 edition.

2. Update Cross References for Extracts in Mandatory Code Sections including:

5.5.2* Electrical equipment and wiring in areas where flammable liquids are handled shall be suitable for the classification of the area, as defined in Chapter 6 Chapters 9-16 of NFPA 30, Flammable and Combustible Liquids Code.

6.3.3.3 These quantities shall be permitted to be doubled if the quantities in excess of those stated in 6.3.3.1 are stored in storage cabinets that meet the requirements of Section 6-3 9.5 of NFPA 30, Flammable and Combustible Liquids Code.

7.3.3 An additional quantity of Level 2 and Level 3 aerosol products, up to a maximum of 227 kg (500 lb) net weight, shall be permitted in back stock areas, where the additional quantities are stored in flammable liquid storage cabinets that meet the requirements of Section 6-3 9.5 of NFPA 30, Flammable and Combustible Liquids Code.

3. Update References from Annex Code Sections including:

H.1.2.1 ASTM Publications. ASTM International, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428-2959.

ASTM D92, Test Method for Flash and Fire Points by Cleveland Open Cup, 2001 2005.

ASTM D240, Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter, 2000 2007.

ASTM D3064, Standard Definitions of Terms and Nomenclature Relating to Aerosol Products, 1997 2008.

Substantiation: This proposal updates the editions of referenced codes and standards to newer editions of the source documents used in NFPA 30B. This action is consistent with the NFPA Manual of Style and the Regulations Governing Committee Projects.

Committee Meeting Action: Accept

Committee Statement: See recommendation and substantiation on proposal 30B-1 (Log #CP1).

Number Eligible to Vote: 21

Ballot Results: Affirmative: 17

Ballot Not Returned: 4 Bellamy, T., Familia, R., Pounder, D., Seuss, Jr., G.

30B-7 Log #CP9 **Final Action: Accept**
(Ch.3 (Various), 6.3.4.3, 6.3.4.4, 6.3.7, & 6.3.8.2.1)

Submitter: Technical Committee on Aerosol Products,

Recommendation: 1. Add new definitions extracted from NFPA 30 to read:

3.3.x Inside Liquid Storage Area. A room or building used for the storage of liquids in containers or portable tanks, separated from other occupancies. [30, 2008]

3.3.x Liquid Storage Room. A room that is used for the storage of liquids in containers, portable tanks, or intermediate bulk containers, has a floor area that does not exceed 46.5 m² (500 ft²), and might be totally enclosed within a building—that is, the room might have no exterior walls. [30, 2008]

3.3.x Liquid Storage Control Area. A building or portion of a building within which flammable and combustible liquids are allowed to be stored, dispensed, and used or handled in quantities that do not exceed the maximum allowable quantity (MAQ) as established by NFPA 30. [30, 2008].

3.3.x Liquid Warehouse. A separate, detached building or an attached building that is used for warehousing-type operations for liquids and whose exterior wall comprises at least 25 percent of the building perimeter. [30, 2008]

2. Revise existing paragraphs 6.3.4.3, 6.3.4.4, 6.3.7 and 6.3.8.2.1 to read:

6.3.4.3 Subject to the approval of the authority having jurisdiction (AHJ), solid pile or palletized storage of level 2 and Level 3 aerosol products shall be permitted in a general-purpose warehouse that is protected throughout by an automatic sprinkler system up to a maximum total quantity of 5450 kg (12,000 lbs) combined net weight of Level 2 and Level 3 aerosol products, subject to the following:

(1) The sprinkler system over the aerosol storage area and for a distance of 6 m (20 ft) beyond shall be designed in accordance with Table 6.3.2.7(a) and Table 6.3.2.7(d).

(2) Storage of flammable and combustible liquids shall be separated from aerosol storage area by at least 8 m (25 ft).

(3) ~~Such storage shall also meet the requirements of 4.5.2 of NFPA 30, Flammable and Combustible Liquids Code.~~

6.3.4.4 Subject to the approval of the authority having jurisdiction (AHJ), rack storage of level 2 and Level 3 aerosol products shall be permitted in a general purpose-warehouse that is protected throughout by an automatic sprinkler system up to a maximum total quantity of 10,900 kg (24,000 lbs) combined net weight of Level 2 and Level 3 aerosol products, subject to the following:

(1) The sprinkler system in the Level 2 and Level 3 aerosol products storage area shall be designed in accordance with Tables 6.3.2.7(e) through Table 6.3.2.7(l). The ceiling sprinkler system design shall extend for 6 m (20 ft) beyond the aerosol products storage area.

(2) Storage of aerosol products shall be separated from storage of flammable and combustible liquids by at least 8 m (25 ft).

(3) ~~Such storage shall also meet the requirements of 4.5.2 of NFPA 30, Flammable and Combustible Liquids Code.~~

6.3.7 Storage of Aerosol Products in Separate, Inside Flammable Liquid Storage Areas, Liquid Storage Rooms, and Liquid Storage Control Areas

6.3.7.1 Storage of aerosol products shall be permitted in separate, inside flammable liquid storage areas, liquid storage rooms, and liquid storage control areas of 47 m² (500 ft²) or less that meet the requirements of NFPA 30, *Flammable and Combustible Liquids Code*, up to a maximum quantity of 454 kg (1000 lb) net weight of Level 2 aerosol products, or 227 kg (500 lb) net weight of Level 3 aerosol products, or 454 kg (1000 lb) net weight of combined Level 2 and Level 3 aerosol products.

6.3.7.2 Storage of aerosol products shall be permitted in separate, inside flammable liquid storage areas, liquid storage rooms, and liquid storage control areas of greater than 47 m² (500 ft²) that meet the requirements of NFPA 30, *Flammable and Combustible Liquids Code*, up to a maximum quantity of 1135 kg (2500 lb) net weight of Level 2 aerosol products, or 454 kg (1000 lb) net weight of Level 3 aerosol products, or 1135 kg (2500 lb) net weight of combined Level 2 and Level 3 aerosol products.

6.3.7.3 Storage of aerosol products shall be permitted in separate, inside flammable liquid storage areas, liquid storage rooms, and liquid storage control areas up to a maximum of 2270 kg (5000 lb) net weight if the separate inside storage area is protected by an automatic sprinkler system that is designed in accordance with Table 6.3.2.7(a) through Table 6.3.2.7(l), whichever is applicable.

6.3.8.2.1 Where aerosol products are stored in a detached, unprotected liquid warehouse, as allowed by Chapter 13 6.4.4 of NFPA 30, *Flammable and Combustible Liquids Code*, the aerosol products shall not be required to be in a segregated area. Storage configuration shall meet the requirements of 6.3.2.17 through 6.3.2.19.

Substantiation: The Committee added the new definitions and revised the existing definitions and provisions to keep the requirements in NFPA 30B consistent with the 2008 edition of NFPA 30.

Committee Meeting Action: Accept

Number Eligible to Vote: 21

Ballot Results: Affirmative: 17

Ballot Not Returned: 4 Bellamy, T., Familia, R., Pounder, D., Seuss, Jr., G.

30B-8 Log #CP2 **Final Action:** Accept
(Chapter 3 Various)

Submitter: Technical Committee on Aerosol Products,

Recommendation: 1. Update existing 3.3.6 definition of Basement with 2008 extracted definition from NFPA 30:

3.3.6 Basement. For the purposes of this Code, a story of a building or structure having one-half or more of its height below ground level and to which access for fire-fighting purposes is restricted. [30, 2008]

2. Replace existing 3.3.7 definition of Bonding with 2007 extracted definition from NFPA 77.

3.3.7 Bonding. For the purpose of controlling static electric hazards, the process of connecting two or more conductive objects together by means of a conductor so that they are at the same electrical potential, but not necessarily at the same potential as the earth. [77, 2007]

3. Replace existing 3.3.15 definition of Grounding with 2007 extracted definition from NFPA 77:

3.3.15 Grounding. The process of bonding one or more conductive objects to the ground, so that all objects are at zero (0) electrical potential; also referred to as earthing. [77, 2007]

4. Update existing 3.3.18.2* definition of Flammable Liquid with 2008 extracted definition from NFPA 30 and add Annex note that extracts text from 4.3.1 of NFPA 30:

3.3.18.2* Flammable Liquid. Any liquid that has a closed-cup flash point below 100°F (37.8°C), as determined by the test procedures and apparatus set forth in Section 4.4 of NFPA 30, and a Reid vapor pressure that does not exceed an absolute pressure of 40 psi (276 kPa) at 100°F (37.8°C), as determined by ASTM D 323, Standard Test Method for Vapor Pressure of Petroleum Products (Reid Method). [30, 2008]

A.3.3.18.2 Flammable liquids are further subclassified according to the following:

(1) Class IA Liquid — Any liquid that has a flash point below 73°F (22.8°C) and a boiling point below 100°F (37.8°C)

(2) Class IB Liquid — Any liquid that has a flash point below 73°F (22.8°C) and a boiling point at or above 100°F (37.8°C)

(3) Class IC Liquid — Any liquid that has a flash point at or above 73°F (22.8°C), but below 100°F (37.8°C) [30:4.3.1]

5. Replace existing 3.3.18.1* definition of Combustible Liquid with 2008 extracted definition from NFPA 30 and add an Annex note that extracts text from 4.3.2 of NFPA 30:

3.3.18.1* Combustible Liquid. Any liquid that has a closed-cup flash point at or above 100°F (37.8°C), as determined by the test procedures and apparatus set forth in Section 4.4 of NFPA 30. [30, 2008]

A.3.3.18.1 Combustible liquids are further subclassified as follows:

(1) Class II Liquid — Any liquid that has a flash point at or above 100°F (37.8°C) and below 140°F (60°C)

(2) Class III Liquid — Any liquid that has a flash point at or above 140°F (60°C)

(a) Class IIIA Liquid — Any liquid that has a flash point at or above 140°F (60°C), but below 200°F (93°C)

(b) Class IIIB Liquid — Any liquid that has a flash point at or above 200°F (93°C)

[30:4.3.2]

6. Add a new definition for 3.3.29.2 Liquid Warehouse with 2008 extracted definition from NFPA 30:

3.3.58.2 Liquid Warehouse. A separate, detached building or an attached building that is used for warehousing-type operations for liquids and whose exterior wall comprises at least 25 percent of the building perimeter. [30, 2008]

Substantiation: This proposal updates the source of extracted definitions to newer editions of the source documents including NFPA 30 and NFPA 77 for terms that are used in NFPA 30B. This action is consistent with the Regulations Governing Committee Projects.

Committee Meeting Action: Accept

Committee Statement: See recommendation and substantiation on proposal 30B-1 (Log #CP1).

Number Eligible to Vote: 21

Ballot Results: Affirmative: 17

Ballot Not Returned: 4 Bellamy, T., Familia, R., Pounder, D., Seuss, Jr., G.

30B-9 Log #7 **Final Action:** Accept in Principle in Part
(Chapter 3 Various (New))

Submitter: Carmella Richards, SC Johnson - A Family Company

Recommendation: Add the following definitions:

Can Disposal Room - A room where large amounts of flammable aerosols are emptied of their contents prior to disposal.

Can Disposal Staging Room - A room where cans are sorted or set up and conveyed directly into the Can Disposal Room.

Non-Communicating Wall - A solid wall that prevents flammables from moving from a flammable handling area to adjacent indoor areas (no doorways, conveyor openings, holes or other openings).

Protected Enclosure - An enclosure that fully encloses flammable propellant filling equipment. The enclosure must have fully enclosed walls made of a solid material with minimal openings for container entry and exit, doorway gaps and make-up air intakes. The enclosure contains a deflagration suppression system, gas monitors and local exhaust ventilation meeting the requirements as specified in this document. In addition, the room surrounding this enclosure has no flexible flammable propellant fittings or hoses.

Protected Enclosure Room - The room that surrounds a protected enclosure.

Substantiation: The change would add clarification and enable can disposal facilities to be addressed in the code. It would also address facilities with flammable propellant filling equipment that is enclosed and who need to take additional safety precautions.

Committee Meeting Action: Accept in Principle in Part

Add new definition 3.3.21 Noncommunicating Wall and renumber existing subsequent definitions:

3.3.21 Noncommunicating Wall. The shared portion of a wall between two building areas having no openings.

Committee Statement: The Committee did not accept the terms can disposal room, can disposal staging area, protected enclosure, protected enclosure room because they are not used in the standard.

The Committee accepted a new definition for noncommunicating wall and made the definition generic.

Number Eligible to Vote: 21

Ballot Results: Affirmative: 17

Ballot Not Returned: 4 Bellamy, T., Familia, R., Pounder, D., Seuss, Jr., G.

30B-10 Log #CP5 **Final Action: Accept**
(3.3.26 Shelf Storage)

Submitter: Technical Committee on Aerosol Products,
Recommendation: Delete 3.3.26 Shelf Storage.
Substantiation: The Committee notes that the term is not used within the Code.
Committee Meeting Action: Accept
Number Eligible to Vote: 21
Ballot Results: Affirmative: 17
Ballot Not Returned: 4 Bellamy, T., Familia, R., Pounder, D., Seuss, Jr., G.

30B-11 Log #9 **Final Action: Accept in Principle**
(3.3.26 Shelf Storage (New))

Submitter: Tracey D. Bellamy, TVA Fire and Life Safety, Inc.
Recommendation: Revise text as follows:
3.3.26* Shelf Storage. Storage on structures that are less than 0.75 m (2½ ft) deep, with shelves usually 0.6 m (2 ft) to 0.9 (3 ft) apart vertically and seldom exceeding 4.5 m (15 ft) in total height.
3.3.26 Shelves are usually 0.6 m (2 ft) to 0.9 (3 ft) apart vertically and seldom exceed 4.5 m (15 ft) in total height.
Substantiation: The current code verbiage using “usually” and “seldom” is not mandatory style language common to code requirements and is best included as a non-mandatory Annex item.
Committee Meeting Action: Accept in Principle
Committee Statement: The Committee believes that its action on proposal 30B-10 (Log #CP5) meets the submitter’s intent.
Number Eligible to Vote: 21
Ballot Results: Affirmative: 17
Ballot Not Returned: 4 Bellamy, T., Familia, R., Pounder, D., Seuss, Jr., G.

30B-12 Log #10 **Final Action: Accept in Principle**
(3.3.27 Solid Shelving and 3.3.23 Rack (New))

Submitter: Tracey D. Bellamy, TVA Fire and Life Safety, Inc.
Recommendation: Revise text as follows:
~~3.3.27 Solid Shelving.~~ Shelving that is solid, slatted, or of other construction, that is located in racks, and that obstructs sprinkler discharge down into the racks.
~~3.3.23.1 Solid Shelf Rack.~~ A rack where shelves are fixed in place with a solid, slatted or wire mesh barrier used as the shelf material and having limited openings in the shelf area.
~~3.3.23.2 Slatted Shelf Rack.~~ A rack where shelves are fixed in place with a series of narrow individual solid supports used as the shelf material and spaced apart with regular openings.
~~3.3.23.3 Open Rack.~~ Racks without shelving or with shelving in racks that are fixed in place with shelves having a solid surface and a shelf area equal to or less than 20 sq ft or with shelves having a wire mesh, slatted surface or other material with openings representing at least 50 percent of the shelf area including the horizontal area of rack members and where the flue spaces are maintained.
~~3.3.23.4 Rack Shelf Area.~~ The area of the horizontal surface of a shelf in a rack defined by perimeter aisle(s) or minimum 3 inch flue spaces on all four sides, or by the placement of loads that block openings that would otherwise serve as the required flue spaces.
Substantiation: The change is needed to provide direction as to the conditions which constitute obstruction of sprinkler discharge and to maintain consistency with NFPA 13.
Committee Meeting Action: Accept in Principle
Revise text as follows:
~~3.3.27 Solid Shelving.~~ Shelving that is solid, slatted, or of other construction, that is located in racks, and that obstructs sprinkler discharge down into the racks.
~~3.3.23.1 Solid Shelf Rack.~~ A rack where shelves are fixed in place with a solid, slatted or wire mesh barrier used as the shelf material and having limited openings in the shelf area. [13, 2010]
~~3.3.23.2 Slatted Shelf Rack.~~ A rack where shelves are fixed in place with a series of narrow individual solid supports used as the shelf material and spaced apart with regular openings. [13, 2010]
~~3.3.23.3 Open Rack.~~ Racks without shelving or with shelving in racks that are fixed in place with shelves having a solid surface and a shelf area equal to or less than 20 sq ft (1.86 sq m) or with shelves having a wire mesh, slatted surface or other material with openings representing at least 50 percent of the shelf area including the horizontal area of rack members and where the flue spaces are maintained. [13, 2010]
~~3.3.23.4 Rack Shelf Area.~~ The area of the horizontal surface of a shelf in a rack defined by perimeter aisle(s) or minimum 6 in. (152 mm) flue spaces on all four sides, or by the placement of loads that block openings that would otherwise serve as the required flue spaces. [13, 2010]
Committee Statement: The submitter’s recommendation was modified to address the current work being done in the proposed A2009 edition of NFPA 13.
Number Eligible to Vote: 21
Ballot Results: Affirmative: 17
Ballot Not Returned: 4 Bellamy, T., Familia, R., Pounder, D., Seuss, Jr., G.

30B-13 Log #15 **Final Action: Accept in Principle**
(3.4.9 Radiant Energy Deflagration Detection)

Submitter: Donald E. Rowson, Industrial Hydrocarbons, Inc.
Recommendation: Section 3.4.9 Add definition:
Radiant Energy deflagration detection: A device that detects radiant energy such as ultraviolet, visible or infrared that is emitted as a product of combustion reaction and obeys the laws of optics.
Substantiation: This is a clarification to users of NFPA 30B 5.11.2 covering radiant energy detectors.
Committee Meeting Action: Accept in Principle
1. Add a new definition for radiant energy–sensing fire detector as 3.4.9 to read:
Radiant Energy deflagration detector: A device that detects radiant energy such as ultraviolet, visible or infrared that is emitted as a product of combustion reaction and obeys the laws of optics.
3.4.9 Radiant Energy–Sensing Fire Detector. A device that detects radiant energy, such as ultraviolet, visible, or infrared, that is emitted as a product of combustion reaction and obeys the laws of optics. [72, 2007]
2. Revise existing 5.11.2 to read:
5.11.2 Where installed, an engineered deflagration suppression system shall meet the requirements of NFPA 69, Standard on Explosion Prevention Systems, and shall use approved radiant energy–sensing fire detectors.
Committee Statement: 1. The Committee added the new definition of radiant energy–sensing fire detector as an extract from the 2007 edition of NFPA 72.
2. The Committee revised the wording in existing 5.11.2 to reflect the correct use of the term.
Number Eligible to Vote: 21
Ballot Results: Affirmative: 17
Ballot Not Returned: 4 Bellamy, T., Familia, R., Pounder, D., Seuss, Jr., G.

30B-14 Log #CP7 **Final Action: Accept**
(4.6.1.1, 4.6.1.2)

Submitter: Technical Committee on Aerosol Products,
Recommendation: Add new provisions to existing 4.6.1 for 4.6.1.1 and 4.6.1.2:
4.6.1 Automatic Sprinkler Protection. Installations of automatic sprinklers, where required by this code, shall be installed in accordance with NFPA 13, Standard for the Installation of Sprinkler Systems, and the provisions of this code.
4.6.1.1 Where the provisions of this code and NFPA 13 differ, the provisions of this code shall prevail.
4.6.1.2 Where this code does not address specific automatic sprinkler protection criteria, the provisions of NFPA 13 shall prevail.
Substantiation: Subsection 21.3.1 of NFPA 13 expresses the intent of the Automatic Sprinkler Committees and the Standards Council that the discharge criteria for protecting aerosols needs to be in accordance with NFPA 30B and that none of the discharge rules of NFPA 13 should apply. However, NFPA 30B has insufficient information regarding the discharge requirements for sprinklers. It appears that NFPA 30B wishes to use the rules of NFPA 13 with certain exceptions as outlined in NFPA 30B, but 4.6.1 is not completely clear on which rules from NFPA 13 need to be applied. The Committee generated this proposal as an attempt to clarify the subject. It is anticipated that additional comments will be made during the comment period to more completely address the subject.
Committee Meeting Action: Accept
Number Eligible to Vote: 21
Ballot Results: Affirmative: 17
Ballot Not Returned: 4 Bellamy, T., Familia, R., Pounder, D., Seuss, Jr., G.

30B-15 Log #8 **Final Action: Reject**
(Chapter 5)

Submitter: Carmella Richards, SC Johnson - A Family Company
Recommendation: Revise text to read as follows:
5.2.4 Room Separation.
5.2.4.1 Can disposal staging areas connected to can disposal rooms, protected enclosure filling rooms, flammable propellant charging and pump rooms shall be separated from adjacent buildings or structures by non-communicating walls or by a distance of at least 1.5 meters (5 ft).
5.2.4.2 Can disposal rooms shall have walls that are as non-communicating as possible. Where openings are required (for can or pedestrian entrance) the staging area will have a positive air pressure as compared to the can disposal room but be negative to all other attached areas.
5.2.4.3 Protected enclosure rooms, flammable propellant charging and pump rooms shall be separated from flammable propellant storage tanks and from flammable and combustible liquids storage by a distance of at least (8 m) 25 ft.
5.3* Building Construction.
5.3.2 Protected enclosure rooms, flammable propellant charging operations, pump rooms and can disposal rooms shall be limited to the ground floor.
5.3.3 Flammable propellant charging, protected enclosures, protected enclosure rooms, pump rooms and can disposal rooms shall be classified as High Hazard Areas, as defined by NFPA 101, Life Safety Code.

5.3.4 Damage-Limiting Construction (“deflagration venting,” “relief walls,” etc.)

5.3.4.2 Flammable propellant charging rooms, flammable propellant pump rooms, can disposal rooms and rooms handling bulk quantities of materials with an HMIS or NFPA fire hazard rating of “4” or where unstable liquids are handled shall have the walls, roofs and all structural members designed to withstand a static pressure of at least five times the release pressure of the deflagration vent closure, but in no case be less than 4.8 kPa (100 lb/ft²).

The walls and all structural members of a protected enclosure shall be designed to withstand a static pressure of at least five times the release pressure of the deflagration relief vent.

5.3.4.3 Walls, floors, ceilings or roofs of flammable propellant charging, can disposal rooms and pump rooms not used for deflagration relief venting shall be constructed of noncombustible materials (cement block, brick, metal, etc.).

5.3.4.4 Deflagration relief venting shall be provided in all new construction of the following areas:

- (1) Flammable propellant charging rooms
- (2) Protected enclosure rooms
- (3) Flammable propellant pump rooms
- (4) Protected enclosures
- (5) Can disposal rooms

5.4 Ventilation.

5.4.1 Mechanical exhaust ventilation shall be provided for flammable concentrate-filling areas and for flammable propellant charging and pump rooms in accordance with 5.4.2 or 5.4.3, as applicable.

5.4.2 (A) The ventilation shall be non-recirculating.

(B) Make-up air (MUA) shall be taken from areas where flammable vapors are not present.

Exception: Make-up air for protected enclosures and can disposal rooms can be pulled into the enclosure via exhaust inside through the various openings (minimal can entry and exit conveyors, doorway gaps, etc.) or can be supplied mechanically. The air flow shall adequately capture the contaminants and prevent them from leaving the enclosure and shall maintain a negative pressure with respect to the protected enclosure room/can disposal staging area.

(C) Air inlets and outlets shall be located so that air flows uniformly across the floor of the room. The bottom of the air inlets and outlets shall be no more than 0.5 ft (0.15 m) above the floor. In addition, ensure that the ductwork is positioned as close to the wall as possible and that any normal release area (disconnect station, etc.) is located in front of the ventilation (not above it).

(D) No change.

(E) Emergency ventilation should be activated automatically at not more than 20 percent of the LEL. It should be designed to provide 150 percent of the air flow rate as determined in 5.4.2(D) or 4 CFM for every square foot of floor area served, whichever is greater. However, if the normal ventilation rate exceeds this emergency ventilation requirement, while not preferred, it is an acceptable alternative.

(F)* Exhaust discharge stacks shall be separated horizontally by at least 3 m (10 ft) from make-up air intakes and shall terminate at least 3 m (10 ft) above the roof and at least 1 m (3 ft) above any other building within 7.6 m (25 ft).

(G) Exhaust ventilation air flow shall be monitored so as to enable automatic shutdown of the LPG filling, pumping and transfer operation in the event of failure of the ventilation system.

(H) All fan blades utilized by the exhaust and make-up air systems shall be non-sparking.

(I) The room shall be maintained at a negative pressure in relation to the ambient air.

- The can disposal room will be ventilated at the rate determined using sound engineering principles. The can disposal staging room will be ventilated at least 6 CFM/square foot of floor area for exhaust.

- Protected enclosure room ventilation shall be provided with:

- Exhaust meeting 5.4.1 through 5.4.2(C), 5.4.2(F) - (I).

- MUA at or less than 90 percent of total exhaust rate of charging equipment exhaust and all other exhausts in the room (to maintain negative pressure).

- Exhaust at a minimum flow of 4 CFM/square foot of floor area.

Emergency ventilation and shutdown shall be activated automatically at not more than 10 percent of the LEL. Emergency ventilation shall be designed to provide at least 6 CFM/square foot of floor area.

- Fume Incinerators.

Fume Incinerators are not recommended.

5.4.6.1 Where installed, fume incinerators used to destroy combustible and flammable vapors and gases in exhaust ventilation shall be designed and installed in accordance with NFPA 86, Standard for Ovens and Furnaces.

5.4.6.2 Where fume incinerators are used, the duct system conveying the vapors shall be monitored by an approved combustible gas detection system.

5.4.6.3 Annunciation of the combustible gas detection system shall occur upon detection of 25 percent of the LEL of the combustible gas.

5.4.6.4 Detection of 50 percent of the LEL of the combustible gas shall activate diverters to direct the vapors to a safe location outdoors.

5.6* Control of Static Electricity. All equipment involved in the manufacture or disposal of flammable aerosol products shall be properly bonded and grounded. Nonconductive materials should not be used. If they must be used (i.e., flexible grounding of ventilation drum exhaust hose), the material must be connected to metal on each end and both ends must be bonded and grounded.

- Static electricity is a common ignition source that may be generated by friction. Repeated contact or separation of two dissimilar substances, the

motion of a liquid in its container during transport or separation of a liquid into droplets can be sources of static discharge leading to ignition of flammable materials.

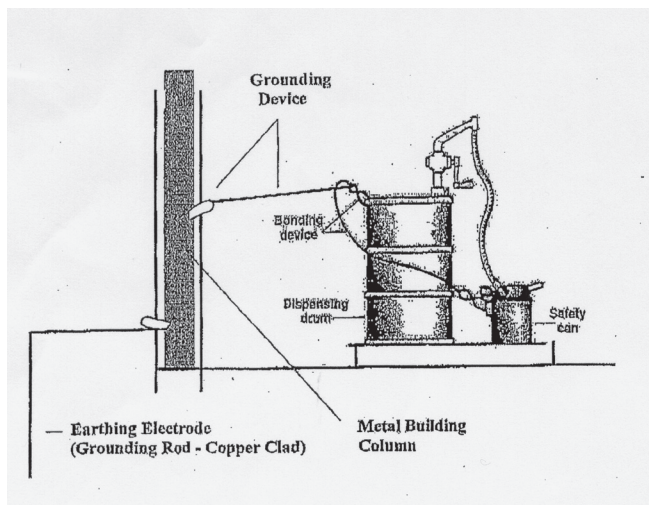
- Prevention of static generation and static accumulation and elimination of spark gaps will prevent the undesirable formation of static electricity.

- To avoid static generation, always minimize agitation and turbulence and avoid spraying and misting of combustibles and flammables. Maintain as slow a flow rate as possible when transferring these materials; the faster the rate of flow, the more static that is generated. Placing fill pipes on the bottom (or within 6 in. of the bottom) of a container will minimize splashing and reduce static generation.

- Grounding is the process of connecting one or more metallic objects to the ground. This discharges a charged conductive body safely. See the diagram following.

- Bonding is accomplished by using a conductor to make an electrical connection between a dispensing and a receiving container, allowing a static charge to dissipate. See diagram below.

- An example of proper bonding and grounding is depicted below:



30B/Figure for Log #8

- Ensure that all bonding and grounding connectors have sharp contact points so that the points directly contact metal (paint will impede or stop the electrical transfer process and present a hazard of building up static electricity which can lead to a fire or an explosion). The clamps may have to be adjusted (wiggled through the paint) to ensure that the point makes it all the way through the paint to the metal.

- Personnel assigned to work in the area must wear minimum protection of 100 percent cotton clothing to reduce the potential for static. Nomex and other fire resistant materials are more protective and may be used, however, they are not required.

5.8 Automatic Sprinkler Protection.

5.8.1* Flammable propellant charging, pump rooms, protected enclosures, protected enclosure rooms, can disposal and their staging rooms shall be protected by either a wet-pipe or a deluge-type automatic sprinkler system. The system shall be designed to meet the requirements of an extra-hazard, Group II occupancy, as set forth in NFPA 13, Standard for the Installation of Sprinkler Systems.

5.8.1.1 Deluge systems shall be activated by an approved detection system. In addition, where no deflagration suppression systems are installed in a protected enclosure room, deluge systems in protected enclosures and protected enclosure rooms shall be activated upon activation of the deflagration suppression system in the protected enclosure.

5.12 Equipment Interlocks. Equipment shall be interlocked so that the system inputs listed in Table 5.12 will result in the associated process/equipment responses given.

(See Table 5.12 on Page 6.)

Substantiation: The change would assure that enclosed propellant filling equipment is addressed in the code. It would also address can disposal facilities. In addition, some clarifications were added.

Committee Meeting Action: Reject

Committee Statement: Technical substantiation (that is testing data) is needed to substantiate the submitter’s suggested enclosure requirements to incorporate design concepts such as those proposed. The Committee recommends that other areas, such as can disposal rooms and fume incinerator material, be submitted in separate comments to the Committee. Annex A.5.6 refers the user to NFPA 77, Recommended Practice on Static Electricity, to manage the hazards of static electricity.

Number Eligible to Vote: 21

Ballot Results: Affirmative: 17

Ballot Not Returned: 4 Bellamy, T., Familia, R., Pounder, D., Seuss, Jr., G.

| Table 5.12 Equipment Interlocks | | | | | | | | |
|--|----|----------------------------------|--------------------|---|----------------|-------------|---------------------------|----------------------------|
| System Inputs | | Process/Equipment Response | | | | | | |
| | | Propellant Supply Pumps Shutdown | Propellant Venting | Propellant Charging or Can Disposal Activity Shutdown | Warning Alarms | Fire Alarms | Standard Ventilation Rate | Emergency Ventilation Rate |
| Protected enclosure or can disposal room – door opened | | No | No | Yes | No | No | On | No |
| Can disposal staging rooms, enclosed courtyards, tank farms, inside pump rooms and protected enclosure rooms – gas detected (% of the LEL) | 10 | NR | NR | NR | Yes | NR | On | NA |
| | 20 | Yes | Yes | Yes | Yes | NR | NA | On |
| Propellant charging rooms, protected enclosures and can disposal rooms – gas detected (% of the LEL) | 20 | NR | NR | NR | Yes | NR | NA | On |
| | 40 | Yes | NR | Yes | Yes | NR | NA | On |
| Loss of Ventilation | | Yes | Yes | Yes | Yes | NR | NA | NA |
| Ventilation at 80% req. | | NR | NR | Yes | Yes | NR | On | NA |
| Ventilation at 90% req. | | NR | NR | NR | Yes | NR | On | NA |
| Emergency stop | | Yes | Yes | Yes | Yes | NR | NA | On |
| Deflagration suppression system disarm or trouble | | Yes | Yes | Yes | Yes | NR | On | NA |
| Gaseous blanketing material (halon 1301, etc.) deflagration suppression system actuation | | Yes | Yes | Yes | Yes | Yes | Off | Off |
| Water deflagration suppression system actuation | | Yes | Yes | Yes | Yes | Yes | NA | On |
| Loss of power | | Yes | Yes | Yes | Yes | NR | NA | NA |
| Gas detection system fault | | | | | | | | |
| Automatic sprinkler actuation | | Yes | Yes | Yes | Yes | NR | N/A | On |
| | | Yes | Yes | Yes | Yes | Yes | N/A | NA |

Note: NR = Not Required; NA = Not Applicable

30B-16 Log #CP6 **Final Action: Accept**
(5.2.4.1.1, 5.2.4.1.2)

Submitter: Technical Committee on Aerosol Products,
Recommendation: Add new provisions to existing 5.2.4.1 for 5.2.4.1.1 and 5.2.4.1.2 to read:

5.2.4.1.1 Noncommunicating walls shall have a minimum fire resistance rating of 1 hour.

5.2.4.1.2 Noncommunicating walls shall meet the requirements of 5.3.4.
Substantiation: The Committee added the fire resistance rating required between the charging and pump rooms and clarified the construction requirements for the wall to be constructed of damage-limiting construction.

Committee Meeting Action: Accept

Number Eligible to Vote: 21

Ballot Results: Affirmative: 17

Ballot Not Returned: 4 Bellamy, T., Familia, R., Pounder, D., Seuss, Jr., G.

Comment on Affirmative:

ROWSON, D.: There is general industry agreement that Propellant Charging and Pump Rooms should be separated from the main production building by construction of a separate propellant charging room located a minimum of 5 feet (1.5 meters) away from the main production facility. Accordingly, this proposal should be accepted as a preferred engineering practice and located in Annex A of the Code. A formal comment will be submitted prior to close of the comment period.

30B-17 Log #16 **Final Action: Reject**
(5.2.4.2)

Submitter: Donald E. Rowson, Industrial Hydrocarbons, Inc.

Recommendation: Change present 5.2.4.2 to 5.2.4.3.

New 5.2.4.2: All new constructed Propellant Charging Rooms and Pump Rooms shall be separated from adjacent buildings or structures by a distance of at least 1.5 m (5 ft) and from outside areas by non-communicating walls.

Substantiation: This is a standard set by the industry and the other options are for existing installations.

Committee Meeting Action: Reject

Committee Statement: The Committee notes that no data has been provided to justify making the requirement more restrictive for new construction. The Committee understands that there is work being developed by CSPA on this subject.

Number Eligible to Vote: 21

Ballot Results: Affirmative: 17

Ballot Not Returned: 4 Bellamy, T., Familia, R., Pounder, D., Seuss, Jr., G.

30B-18 Log #CP10 **Final Action: Accept**
(5.3.4, 5.3.5)

Submitter: Technical Committee on Aerosol Products,

Recommendation: Revise existing 5.3.4 and 5.3.5 as follows:

5.3.4 Damage-Limiting Construction.

5.3.4.1* New flammable propellant charging rooms, flammable propellant pump rooms, and rooms in which Class IA liquids or unstable liquids are handled shall be designed to direct flame, combustion gases, and pressures resulting from deflagration away from important buildings or occupied areas through the use of damage-limiting construction.

5.3.4.1.1 The damage-limiting construction shall be in accordance with recognized standards and shall be subject to approval of the authority having jurisdiction (AHJ).

5.3.4.1.2 Existing rooms that cannot be designed to direct flame, combustion gases, and pressures resulting from a deflagration away from important buildings or other occupied areas shall be designed to control the deflagration to the room of origin using techniques provided in NFPA 69, Standard on Explosion Prevention Systems.

5.3.4.2 The walls, roof, and all structural members shall be designed to withstand a static pressure of at least five times the release pressure of the deflagration vent closure, but in no case less than 4.8 kPa (100 lb/ft²).

5.3.4.3 Damage-limiting construction shall be designed in accordance with NFPA 68, Standard on Explosion Protection by Deflagration Venting.

5.3.4.45-3-43 Walls, floors, ceilings, or roofs of flammable propellant charging and pump rooms not used for deflagration relief venting shall be constructed of noncombustible materials.

5.3.4.55-3-5 Deflagration relief venting shall be provided in all new construction of the following areas:

- (1) Flammable propellant charging rooms
- (2) Flammable propellant pump rooms
- (3) Areas in which Class IA liquids or unstable liquids are handled

5.3.5-1* Deflagration venting shall be designed at a ratio of not less than 0.09 m² (1 ft²) of vent area for 0.85 m³ (30 ft³) of room volume.

A-5.3.5-1

5.3.4.65-3-5-1 Deflagration vents shall relieve to a safe location to avoid injury to personnel and to minimize property damage.

5.3.4.7 Deflagration venting shall be designed and installed in accordance with NFPA 68, Standard on Explosion Protection by Deflagration Venting.

5.3.4.85-3-5-3 In existing rooms where deflagration venting cannot be installed, a deflagration suppression system that meets the requirements of NFPA 69, Standard on Explosion Prevention Systems, shall be installed.

5.3.4.9 Deflagration vents shall be maintained in accordance with 8.6.3.

Substantiation: The Committee revised existing 5.3.4 and 5.3.5 because NFPA 68 is now a standard whereas it was previously a guide, and the Committee could not mandate compliance with a guide in the body of the code.

Committee Meeting Action: Accept

Number Eligible to Vote: 21

Ballot Results: Affirmative: 17

Ballot Not Returned: 4 Bellamy, T., Familia, R., Pounder, D., Seuss, Jr., G.

30B-19 Log #17 **Final Action: Accept in Principle**
(5.3.5.4 (New))

Submitter: Donald E. Rowson, Industrial Hydrocarbons, Inc.

Recommendation: Add new text as follows:

5.3.5.4 (NFPA 68: 10.3.6 Obstructions- 1996 Code 5.2.2 of 68 NFPA) Vent enclosures should open dependably. Then proper operation should not be hindered by deposits of snow, ice, paint, sticky materials, polymers, etc. Their operation should not be prevented by corrosion or by objects that obstruct the openings of the vent closure, e.g. piping, air conditioning ducts or structural steel.

Substantiation: Deflagration vents should be free of any obstructions per NFPA 68 (1996) 5.2.2. This requirement is often overlooked and needs to be inserted into NFPA 30B.

Committee Meeting Action: Accept in Principle

1. Add new text from NFPA 68 identified as 5.3.5.4 in the recommendation to read:

5.3.4.9 Deflagration vents shall be maintained in accordance with 8.6.3.

2. Add new text from Section 11.9 of NFPA 68 as 8.6.3 that uses extracted text from the 2007 edition of NFPA 68 to read:

8.6.3 Maintenance. [68:11.9]

8.6.3.1 Deflagration vent closure maintenance shall be performed after every act of nature or process upset condition to ensure that the closure has not been physically damaged and there are no obstructions including, but not limited to, snow, ice, water, mud, or process material that could lessen or impair the efficiency of the vent closure. [68:11.9.1]

8.6.3.2 An inspection shall be performed in accordance with 11.4.4 of NFPA 68, Standard for Explosion Protection by Deflagration Venting, after every process maintenance turnaround. [68:11.9.2]

8.6.3.3 If process material has a tendency to adhere to the vent closure, the vent closure shall be cleaned periodically to maintain vent efficiency. [68:11.9.3]

8.6.3.4 Process interlocks, if provided, shall be verified. [68:11.9.4]

8.6.3.5 Known potential ignition sources shall be inspected and maintained. [68:11.9.5]

8.6.3.6 Records shall be kept of any maintenance and repairs performed. [68:11.9.6]

Committee Statement: 1. See recommendation and substantiation on proposal 30B-18 (Log CP#10) that revises 5.3.4 and adds 5.3.4.9.

2. The Committee agreed with the submitter's intent but extracted the provision from the 2007 edition of NFPA 68 as new 8.6.3 to provide clarity to the submitter's recommendation since the submitter used the 1996 edition of NFPA 68. The Committee action is consistent with the NFPA Regulations Governing Committee Projects for adding or updating extracted text.

Number Eligible to Vote: 21

Ballot Results: Affirmative: 17

Ballot Not Returned: 4 Bellamy, T., Familia, R., Pounder, D., Seuss, Jr., G.

30B-20 Log #14 **Final Action: Accept in Principle**
(5.13.3.2(E) (New))

Submitter: Michael Martin, Diversified CPC International, Inc.

Recommendation: Add new text as follows:

An automatic shutdown device shall be installed on the discharge of high pressure propellant booster pumps. This device shall be set so that the high pressure pump shuts down if the pressure in the downstream propellant bypass return piping reaches a minimum of 50 psig below the set pressure of hydrostatic relief valves installed in the propellant bypass return piping. This can be accomplished by the installation of a high pressure shutdown switch, or a safety relief valve installed in the propellant bypass return line (set at a minimum of 50 psig below the setting of the hydrostatic relief valves), and vented into a vent pipe equipped with a flow switch or sensor.

Substantiation: High pressure propellant booster pumps servicing propellant charging rooms can have operating pressures (800 – 1000 psig) that exceed the typical settings of hydrostatic relief valves in propellant bypass return piping installed downstream of the back pressure regulating valve in the propellant charging room piping system. If these pumps are permitted to operate with a closed automatic or manual valve installed in the bypass return piping back to the storage tanks, there is the potential for an uncontrolled release of liquefied flammable gas propellant from the hydrostatic relief valve(s) in the propellant tank farm area that may go unmonitored, creating a hazardous situation.

Committee Meeting Action: Accept in Principle

Add new paragraph 5.13.3.3 with subsections and Annex note to read as follows:

5.13.3.3 High pressure propellant booster pumps equipped with backpressure regulating valves and return lines shall be provided with an automatic shutdown device in the return line.

5.13.3.3.1* The shutdown device shall be set so that the high pressure pump shuts down if the pressure in the propellant bypass return piping (downstream of the backpressure regulating valve) reaches a minimum of 50 psig (345 kPa) below the set pressure of hydrostatic relief valves installed in the propellant bypass return piping.

A.5.13.3.3.1 This can be accomplished by the installation of a high pressure shutdown switch, or a safety relief valve installed in the propellant bypass return line (set at a minimum of 50 psig (345 kPa) below the setting of the hydrostatic relief valves), and vented into a vent pipe equipped with a flow switch or sensor.

Committee Statement: The Committee agreed with the submitter's intent but individually numbered the submitter's recommendation to comply with the NFPA Manual of Style. Nonmandatory text was placed as annex material.

Number Eligible to Vote: 21

Ballot Results: Affirmative: 17

Ballot Not Returned: 4 Bellamy, T., Familia, R., Pounder, D., Seuss, Jr., G.

Comment on Affirmative:

FRAUENHEIM, III, W.: It has been brought to my attention from one of the CSPA member companies that there may be other alternative methods that can be employed to meet the intent of the proposed code change identified as 30B-20 (Log #14). This could include providing actuated valves with limit switches for all shutoff valves in the propellant return line. This company utilizes a safety interlock system that requires proof that all valves in the return line are in the open position, before the high pressure propellant pump is permitted to be turned on. The committee may wish to review this option, or other acceptable methods of meeting the intent of this code change at the ROC meeting.

30B-21 Log #CP12 **Final Action: Reject**
(6.3.1.1, 6.3.1.1.1)

Submitter: Technical Committee on Aerosol Products,

Recommendation: Revise 6.3.1.1 and 6.3.1.1.1 as follows:

6.3.1.1 Level 2 and Level 3 aerosol products in containers whose net weight is less than 28 g (1 oz) shall be considered to be equivalent to cartoned unexpanded Group A plastics, as defined in NFPA 13, Standard for the Installation of Sprinkler Systems.

6.3.1.1.1 In cases where the storage of Level 2 and Level 3 aerosol products in containers whose net weight is less than 28 g (1 oz) is required to be protected, such storage shall be in accordance with the requirements set forth in NFPA 13, Standard for the Installation of Sprinkler Systems, for cartoned unexpanded Group A plastics.

Substantiation: The Committee is attempting to clarify which paragraph, 6.3.1.1 or 6.3.1.1.1, addresses Level 2 and Level 3 aerosol products.

Committee Meeting Action: Reject

Committee Statement: Due to the unavailability of information at the ROP meeting, the Committee intends to clarify which paragraph, 6.3.1.1 or 6.3.1.1.1, addresses Level 2 and Level 3 aerosol products by means of a public comment after researching the previous editions of the code.

Number Eligible to Vote: 21

Ballot Results: Affirmative: 17

Ballot Not Returned: 4 Bellamy, T., Familia, R., Pounder, D., Seuss, Jr., G.

30B-22 Log #4 **Final Action: Reject**
(Figure 6.3.2.7(a) through (e))

Submitter: Kenneth E. Isman, National Fire Sprinkler Association, Inc.

Recommendation: Include plan views with all of the in-rack sprinklers shown.

Substantiation: The current figures only show one tier of in-rack sprinklers and are confusing to installing contractors. NFPA 13 uses plan views to show all of the sprinklers in the rack structure. Different symbols are used to show sprinklers at different elevations to avoid confusion.

Since NFPA 30B is not using the same graphic format, contractors are leaving sprinklers out of the design and installation because they don't appear in the plan views.

Committee Meeting Action: Reject

Committee Statement: Although the Committee agrees with the submitter's substantiation, it requests the submitter to submit a public comment with the revised drawings so that the recommendation can be implemented.

Number Eligible to Vote: 21

Ballot Results: Affirmative: 17

Ballot Not Returned: 4 Bellamy, T., Familia, R., Pounder, D., Seuss, Jr., G.

30B-23 Log #3 **Final Action: Accept in Principle**
(Table 6.3.2.7(e) through (l))

Submitter: Kenneth E. Isman, National Fire Sprinkler Association, Inc.

Recommendation: For the English Units tables, change the in-rack sprinkler type from "K \geq 5.6" to "K-5.6 or K-8"

For the Metric Units tables, change the in-rack sprinkler type from "K \geq 81" to "K-80 or K-115"

Substantiation: NFPA 13 currently only allows K-5.6 (KM-80) or K-8 (KM-115) sprinklers to be used for in-rack sprinklers. By using the ">" sign, NFPA 30B is allowing much larger sprinklers to be used, which could be a mistake given that they will be used at lower pressures to maintain the same flow. While larger orifice in-rack sprinklers are being investigated for certain hazards (and are currently used in NFPA 30B in Table 7.4.1) we believe that such use should be limited to situations where tests have determined that they work, rather than opening the door to use of very large orifice sprinklers in-racks without any control.

Committee Meeting Action: Accept in Principle

Revise K-factors for in-rack sprinklers in Table 6.3.2.7(e) through 6.3.2.7(l) as follows:

1. For the English Units tables, change the in-rack sprinkler type from "K \geq 5.6" to "K-5.6 or K-8"

2. For the Metric Units tables, change the in-rack sprinkler type from "K \geq 81" to "K-80 or K-115"

3. For the English Units tables, change the in-rack sprinkler type from "K \geq 8" to "K-8 or K-11.2"

4. For the Metric Units tables, change the in-rack sprinkler type from "K \geq 115" to "K-115 or K-160"

Committee Statement: The Committee wants to limit the orifice size of the in-rack sprinklers for proper water distribution.

Number Eligible to Vote: 21

Ballot Results: Affirmative: 17

Ballot Not Returned: 4 Bellamy, T., Familia, R., Pounder, D., Seuss, Jr., G.

30B-24 Log #1 **Final Action: Reject**
(6.3.2.9)

Submitter: Kenneth E. Isman, National Fire Sprinkler Association, Inc.

Recommendation: Revise 6.3.2.9 to read as follows:

6.3.2.9 Installation of in-rack sprinklers shall be in accordance with the protection rules for Group A plastics in NFPA 13, Standard for the Installation of Sprinkler Systems, except as modified by Table 6.3.2.7(e) through 6.3.2.7(l) and the figures referenced by the tables.

Substantiation: The blanket reference to NFPA 13 is inappropriate, NFPA 13 only contains in-rack sprinkler information for Class I-IV commodities and Group A plastics. Section 21.3.1 sends the user to NFPA 30B for Aerosol protection. Sending the user back to NFPA 13 just creates a circular reference.

If the intent of the reference is to require longitudinal flue spaces when NFPA 13 does for other commodities and to follow the other rules for commodities stored in racks, then you need to specify which of the other commodities that are covered by NFPA 13 you want people to use.

The figures were also added to the reference since they contain the requirements on where to put the in-rack sprinklers, overriding any rules from NFPA 13.

Committee Meeting Action: Reject

Committee Statement: The reference to a specific commodity classification leads to confusion for the users of the code. The situation that the submitter is trying to clear up is better addressed by proposal 30B-14 (Log #CP7).

Number Eligible to Vote: 21

Ballot Results: Affirmative: 17

Ballot Not Returned: 4 Bellamy, T., Familia, R., Pounder, D., Seuss, Jr., G.

30B-25 Log #11 **Final Action: Accept in Principle**
(6.3.2.14)

Submitter: Tracey D. Bellamy, TVA Fire and Life Safety, Inc.

Recommendation: Revise text as follows:

6.3.2.14 Quick-response, ~~o~~ Ordinary or intermediate temperature rated K=25.2 extended-coverage sprinklers shall be permitted to be used for all density spray sprinkler design criteria in Table 6.3.2.7(a) through Table 6.3.2.7(l) when installed in accordance with their listing.

Substantiation: The extended coverage K=25.2 sprinkler contains a fast response operating element as provided by NFPA 13, 3.6.1 (1) but is not listed as quick response sprinkler. A fast response operating element is utilized to achieve the required performance objectives at the allowable extended coverage spacing for the sprinkler. As such the quick response designation is not appropriate.

Committee Meeting Action: Accept in Principle

Revise submitter's recommendation for 6.3.2.14 to read as follows:

6.3.2.14 Quick-response, ~~o~~ Ordinary or intermediate temperature rated K=25.2 extended-coverage spray sprinklers shall be permitted to be used for all density spray sprinkler design criteria in Table 6.3.2.7(a) through Table 6.3.2.7(l) when installed in accordance with their listing.

Committee Statement: The Committee wanted to clarify that this is not an ESFR sprinkler.

Number Eligible to Vote: 21

Ballot Results: Affirmative: 17

Ballot Not Returned: 4 Bellamy, T., Familia, R., Pounder, D., Seuss, Jr., G.

30B-26 Log #12 **Final Action: Accept**
(6.3.4.3)

Submitter: Tracey D. Bellamy, TVA Fire and Life Safety, Inc.

Recommendation: Revise text as follows:

6.3.4.3 Subject to...
(1) The sprinkler system over the aerosol storage area and for a distance of 6 m (20 ft) beyond shall be designed in accordance with Table 6.3.2.7(a) and through Table 6.3.2.7(d).

Remainder of section unchanged.

Substantiation: The reference should be to the range of Tables 6.3.2.7(a) through 6.3.2.7(d).

Committee Meeting Action: Accept

Number Eligible to Vote: 21

Ballot Results: Affirmative: 17

Ballot Not Returned: 4 Bellamy, T., Familia, R., Pounder, D., Seuss, Jr., G.

30B-27 Log #13 **Final Action: Accept in Principle**
(A.3.3.28.2 Face Sprinklers (New))

Submitter: Tracey D. Bellamy, TVA Fire and Life Safety, Inc.

Recommendation: Add new Annex text as follows:

A.3.3.28.2 All face sprinklers should be located within the rack structure. The flue spaces are generally created by the arrangement of the racks and walkways should not be considered flue spaces.

Add an asterisk Annex reference to 3.3.28.2.

Substantiation: Sprinklers installed under walkways should not be considered to meet the requirements for face sprinklers and other sprinklers required in flue spaces. The change is needed to maintain consistency with NFPA 13.

Committee Meeting Action: Accept in Principle

Add new Annex material for A.3.3.28.2 Face Sprinklers as follows:

A.3.3.28.2 All face sprinklers should be located within the rack structure. The flue spaces are generally created by the arrangement of the racks. Walkways should not be considered flue spaces.

Committee Statement: The Committee clarified that walkways are not considered flue spaces.

Number Eligible to Vote: 21

Ballot Results: Affirmative: 17

Ballot Not Returned: 4 Bellamy, T., Familia, R., Pounder, D., Seuss, Jr., G.

30B-28 Log #CP8 **Final Action: Accept**
(A.3.4.6 Propellant Charging Room (New))

Submitter: Technical Committee on Aerosol Products,

Recommendation: Add a new Annex text to existing 3.4.6 Propellant Charging Room (Gas House, Gassing Room) definition:

A.3.4.6 Propellant Charging Room. The customary arrangement of equipment in a propellant charging room includes one or two propellant fillers and a high pressure propellant charging pump(s), if required. Occasionally the vacuum pump will also be located in the propellant charging room, especially if one of the propellant fillers is an under-the-cup filler. The fillers have guard enclosures to prevent operator contact with mechanical hazards of the machine and to also protect from flying debris if a can ruptures or is thrown from the machine by a jam.

The filling machine enclosure is normally constructed of a permeable material, such as wire mesh, of sufficient strength to confine debris or loose cans, as necessary, but will allow complete ventilation of the machine. The wire mesh design works in conjunction with the propellant charging room ventilation system to completely dilute and remove propellant routinely released at the point where the filling head disengages from the aerosol container. It also allows propellant from incidental leaks on the machine to be swept into the ventilation stream and safely removed. In addition, the wire mesh also allows the propellant charging room deflagration detection and suppression system to function effectively, since it does not block detection of the deflagration and the distribution of the suppression media.

Local ventilation can be provided at the head/container disengagement point to more efficiently remove propellant vapors at the source of release. See 5.4.2 to determine ventilation rate requirements. Local ventilation can replace up to 75 percent of the required ventilation for the propellant charging room; however, the propellant charging room ventilation is not permitted to be less than one air change per minute.

The basic requirements of this code pertain to this customary arrangement and design of the propellant charging room and associated equipment. Further design considerations are possible, but will require the application of sound design principles, testing, and technical documentation approved by the authority having jurisdiction (AHJ) to assure safe operation. One example of further design considerations that falls outside of the basic requirements of this code is a propellant filling machine guard enclosure that is constructed of non-permeable materials. Design consideration for such an arrangement should include proper ventilation and gas detection within the enclosure to prevent accumulation of propellant above safe LEL percentage limits, deflagration venting that does not endanger the operator, deflagration detection and suppression within the enclosure, and damage-limiting construction to prevent violent rupture of the enclosure in the event of a deflagration. In small enclosures, even suppressed deflagrations can result in significant pressure build-up due to the ratio of the volume of expanding gases with respect to the volume of the enclosed space, plus the added volume of the suppression media and compressed gas.

Substantiation: The Committee believes that additional information was needed about the layout and equipment in propellant charging rooms.

Committee Meeting Action: Accept

Number Eligible to Vote: 21

Ballot Results: Affirmative: 17

Ballot Not Returned: 4 Bellamy, T., Familia, R., Pounder, D., Seuss, Jr., G.

30B-29 Log #CP11 **Final Action: Accept**
(F.1(a)Footnote c)

Submitter: Technical Committee on Aerosol Products,

Recommendation: Revise F.1(a) Footnote c as follows:

c Materials that have either (1) a closed-cup flash point greater than 500°F (260°C); or (2) no fire point when tested in accordance with ASTM D 92, Test Method for Flash and Fire Points by Cleveland Open Cup, or (3) are combustible solids. Such materials contribute very little to the overall fire hazard of aerosol products in an actual fire, due to incomplete combustion or inconsistent burning behavior (i.e., the majority of the released material does not burn). Such materials are considered to be “noncontributory” to the overall determination of the product’s level of classification. They can be ignored or they can be assigned a chemical heat of combustion (Hc) of 0 kJ/g.

Substantiation: The full-scale fire testing of vegetable oil-based aerosol products demonstrated that they are not equivalent to Level 1 aerosols. The testing showed that they might be equivalent to Level 2 aerosols. The exclusion to the flash point greater than 500°F (260°C) was based on limited-scale tests of cooking sprays, which indicated that they would behave like Level 1 aerosols. The Committee is aware that there might be data that justifies the removal of the stricken text.

Committee Meeting Action: Accept

Number Eligible to Vote: 21

Ballot Results: Affirmative: 17

Ballot Not Returned: 4 Bellamy, T., Familia, R., Pounder, D., Seuss, Jr., G.

30B-30 Log #18 **Final Action: Reject**
(Index)

Submitter: Marko J. Saric, Jr., The Sherwin-Williams Company

Recommendation: Editorial Change:

The incorrect section numbers are listed under “combustible gas” in the index.

Detection System

Combustible Gas.....5.4.6.2, 5.4.6.3, 5.7, A.5.7

Substantiation: Editorial Change.

Committee Meeting Action: Reject

Committee Statement: The Index of the code is a staff function and therefore, the Committee is unable to accept proposals for changes to the Index.

However, the Staff Liaison will forward your request to the production staff at NFPA. The information will be addressed by the NFPA editorial staff.

Number Eligible to Vote: 21

Ballot Results: Affirmative: 17

Ballot Not Returned: 4 Bellamy, T., Familia, R., Pounder, D., Seuss, Jr., G.